# THE CROSSING AT VILLAGE CENTER RESIDENTIAL DEVELOPMENT

# **RECORD OWNERS:**

TAX MAP 238 LOT 36 WALDRON HALEY REV LIV TRUST 14 SHAKESPEARE RD. NASHUA, NH 03062

# APPLICANT:

J&L TERRA HOLDINGS, INC. 79 EXETER ROAD N. HAMPTON, N.H. 03862

### APPROVAL BLOCK

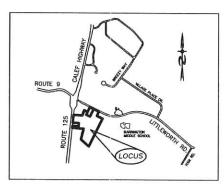
APPROVED TOWN OF BARRINGTON PLANNING BOARD CHAIRPERSON



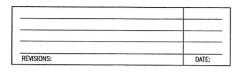


# WETLAND/SOIL CONSULTANT:

GOVE ENVIRONMENTAL SERVICES INC. 8 CONTINENTAL DRIVE, BLDG 2 UNIT H EXETER, NH 03833 1-603-778-0644









# REQUIRED PERMITS

NHDES SUBDIVISION APPROVAL NUMBER: SA 2020

# CIVIL ENGINEERS:

BEALS · ASSOCIATES PLLC 70 PORTSMOUTH AVE. STRATHAM, NEW HAMPSHIRE

PHN. 603-583-4860, FAX. 603-583-4863

# LAND SURVEYORS:

DAVID W. VINCENT, LLS LAND SURVEYING SERVICES PO BOX 1622 DOVER, NH 03821

UTILITY POLE EXISTING LIGHT POLE	r D	FENCING DRAINAGE LINE	x
EXISTING CATCH BASIN		STONE WALL	**************************************
EXISTING HYDRANT	¥.	TREE LINE	·
SINGLE POST SIGN	<del>-v-</del>	ABUT, PROPERTY LINES	
PINES, ETC.	**	EXIST. PROPERTY LINES	
MAPLES, ETC.	8	BUILDING SETBACK LINES	
EXIST. SPOT GRADE	96x69	EXIST. CONTOUR	— — 100 —  —  —
PROP. SPOT GRADE	96x69	PROP. CONTOUR	
TEST PIT	96x69 11A	SOIL LINES	

INDEX

SUBDIVISION BOUNDARY PLANS

EXISTING CONDITION PLANS

SUBDIVISION SITE PLANS

HIGHWAY ACCESS PLAN

CONSTRUCTION DETAILS

UTILITY DETAILS PLAN

CISTERN DETAIL PLAN

**EROSION & SEDIMENT** 

CONTROL DETAILS

PLAN & PROFILES

TITLE SHEET

LAND USE OFFICE

PLAN SET LEGEND

1 - 2

3 - 4

5 - 7

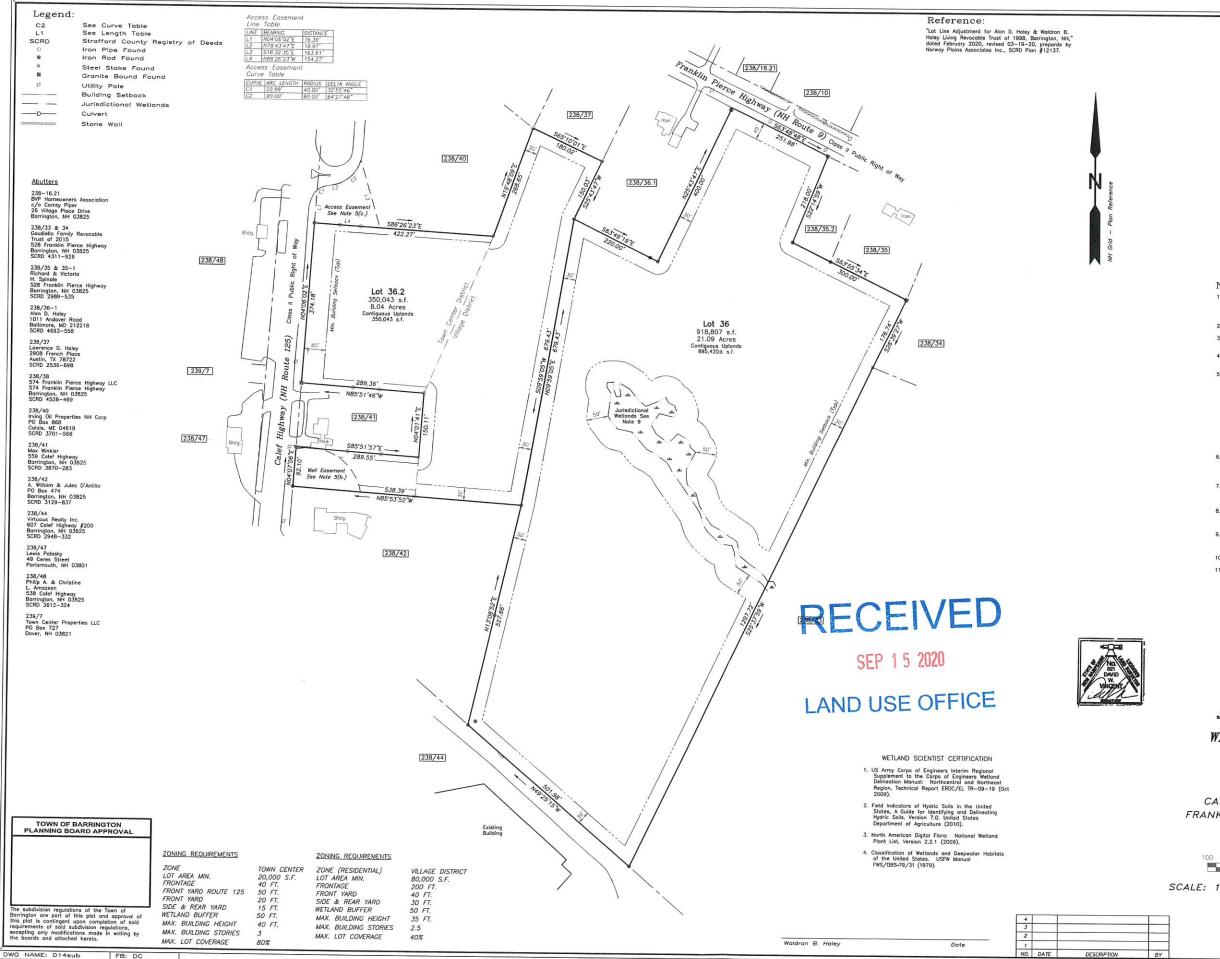
9 - 11

12

13

14

15





#### Notes:

- ) This plan does not represent a determination of title and the purpose of this plan is to subdivide the subject parcel into two parcels utilizing the boundary information depicted on the plan reference. Each lot is served by individual septic system and private well.
- 2.) Plan Error of Closure Better Than 1:15,000.
- Parcel is shown as Lot 36.1 on the Town of Barrington Assessor's Map 238.
- Parcel is located in the Town Center District, Village District & Wetland Protection District Overlay (50' from edge of jurisdictional wetlands).
- 5.) Owner of Record: Woldron B. Haley Living Revocable Trust of 1998
  14 Shakespeare Road
  - a.) Parcel is subject to the terms and restrictions to the State of New Hampshire as described in SCRD Bk 850, Pg 497.
- b.) Parcel is subject to a Protective Well Radius as described in SCRD Bk 1903, Pg 516.
- c.) Parcel has the benefit of an access easement as described in
- This plan does not show any unrecorded or unwritten easements which may exist. A reasonable and diligent attempt has been made to observe any apparent, visible uses of the land; however this does not constitute that no such easements exist.
- Parcel is not located in a Flood Hazard Zone as depicted on Flood Insurance Rate Map, No. 33017C0305E, Strafford County, NH, (All Jurisdictions). Effective Date: May 17, 2005.
- Existing Lot Area: 29.13 Acres Proposed Lot 36: 21.09 Acres Proposed Lot 36.2: 8.04 Acres
- The wetland areas shown hereon were field delineated by Gove Environmental Services, Inc., of 8 Continental Drive, Building #2, Unit H, Exeter, NH.
- 10.) NHDOT Driveway Permit: Pending.
- 11.) Required erosion control measures shall be installed prior to disturbance of the sites surface and shall be maintained throughout the completion of all construction, if it becomes apporent that additional erosion control measures are required to stop any erosion on the construction site due to octual conditions, the owner shall be required to install the necessary erosion protection at no expense to the Town.

MINOR SUBDIVISION PLAN
PREPARED FOR

J & L TERRA HOLDINGS INC.

OF PROPERTY IN THE NAME OF

WALDRON B. HALEY REVOCABLE

WALDRON B. HALEY REVOCABLE LIVING TRUST OF 1998

TAX MAP 238 / LOT 36

CALEF HIGHWAY (NH ROUTE 125) & FRANKLIN PIERCE HIGHWAY (NH ROUTE 9)

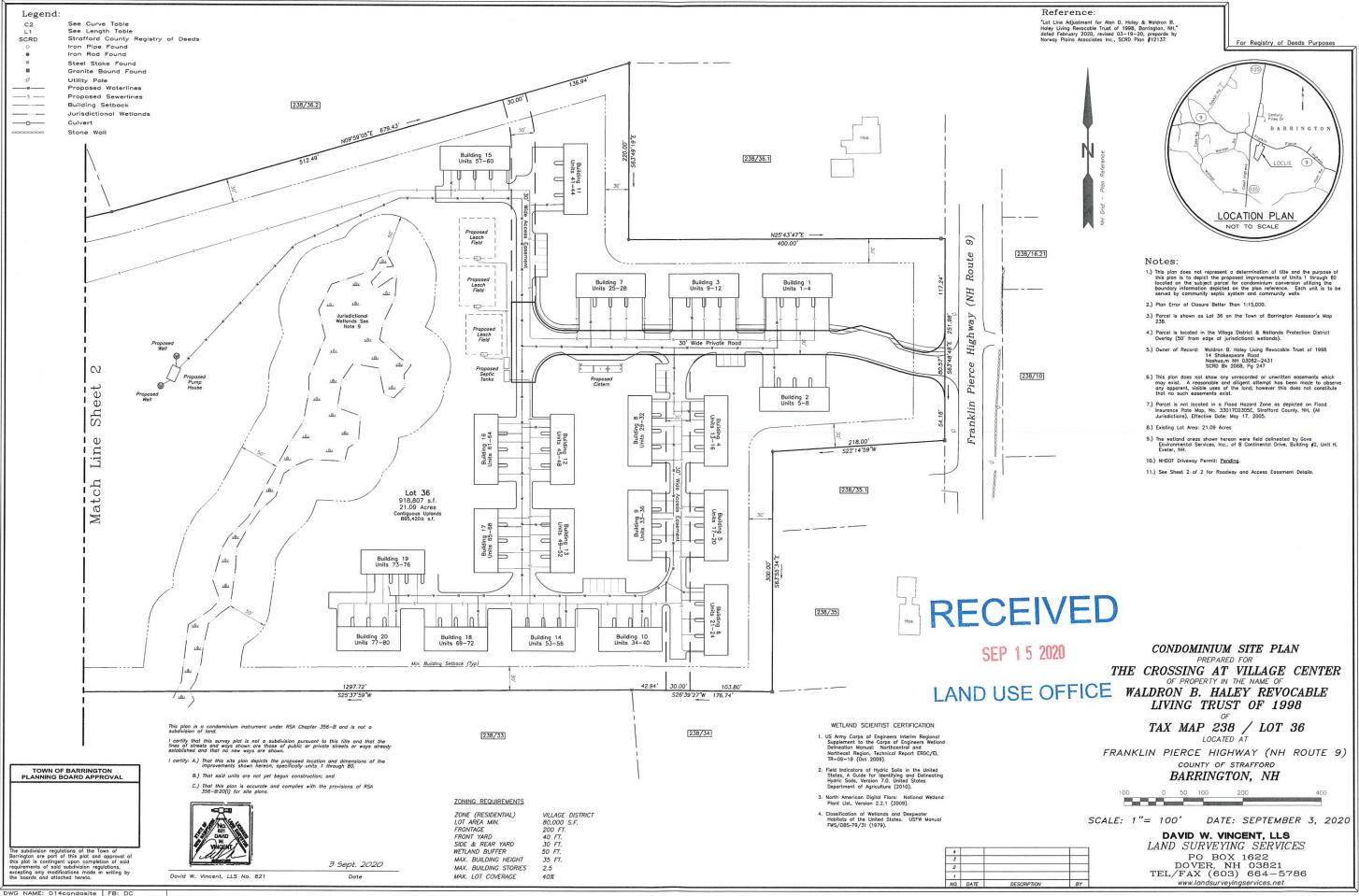
BARRINGTON, NH

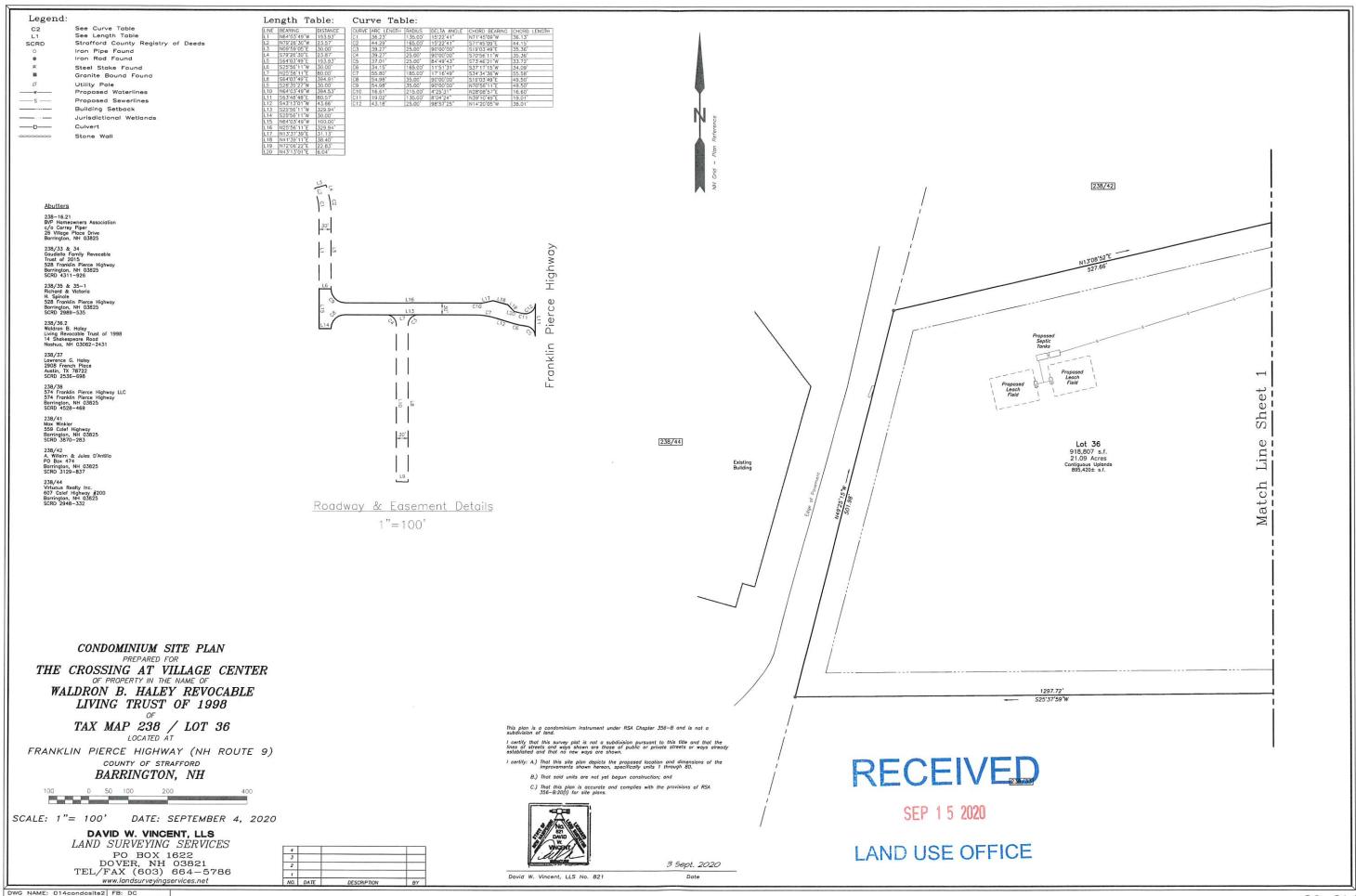


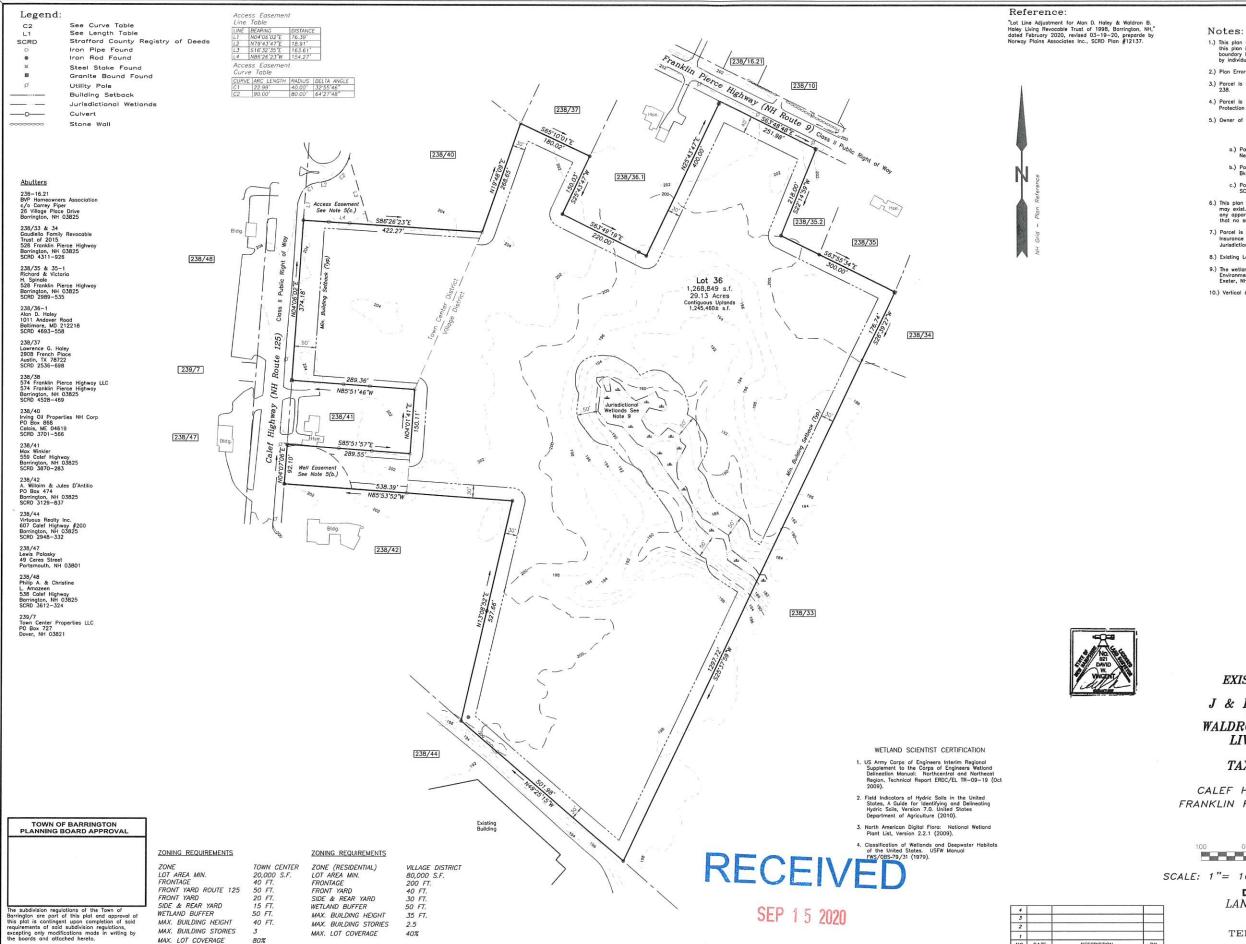
SCALE: 1"= 100' DATE: SEPTEMBER 3, 2020

DAVID W. VINCENT, LLS

LAND SURVEYING SERVICES
PO BOX 1622
DOVER, NH 03821
TEL/FAX (603) 664-5786







- 1.) This plan does not represent a determination of title and the purpose of this plan is to subdivide the subject parcel into two porcels utilizing the boundary information depicted on the plan reference. Each lat is served by individual septic system and private well.
- 2.) Plan Error of Closure Better Than 1:15,000.
- Parcel is shown as Lot 36.1 on the Town of Barrington Assessor's Map 238.

- b.) Parcel is subject to a Protective Well Radius as described in SCRD Bk 1903, Pg 516.

- Parcel is not located in a Flood Hazard Zone as depicted on Flood Insurance Rate Map, No. 33017C0305E, Strafford County, NH, (All Jurisdictions), Effective Date: May 17, 2005.
- 8.) Existing Lot Area: 29.13 Acres

EXISTING CONDITIONS PLAN PREPARED FOR

J & L TERRA HOLDINGS INC. WALDRON B. HALEY REVOCABLE LIVING TRUST OF 1998

TAX MAP 238 / LOT 36 LOCATED AT

CALEF HIGHWAY (NH ROUTE 125) & FRANKLIN PIERCE HIGHWAY (NH ROUTE 9)

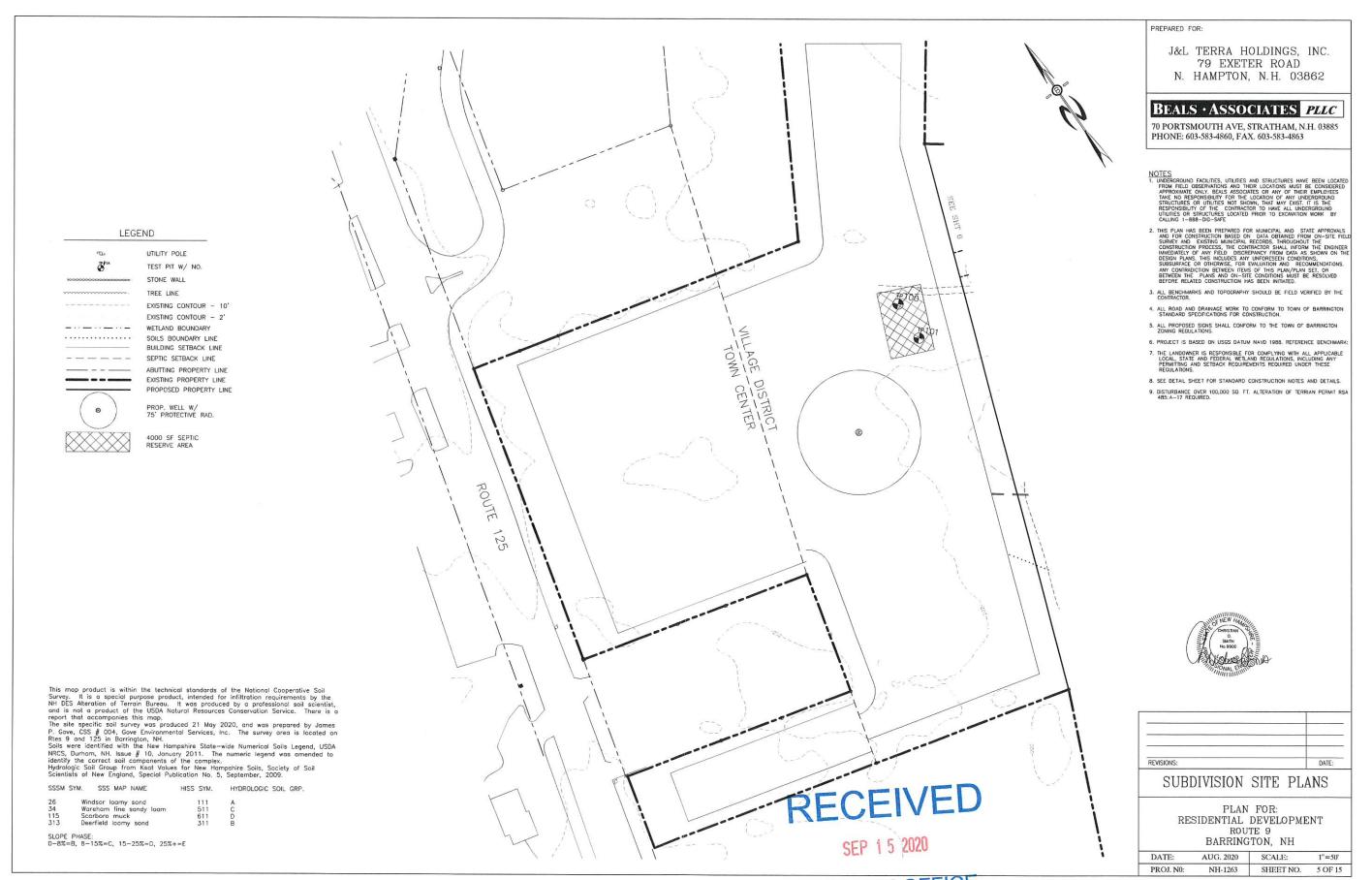
> COUNTY OF STRAFFORD BARRINGTON, NH

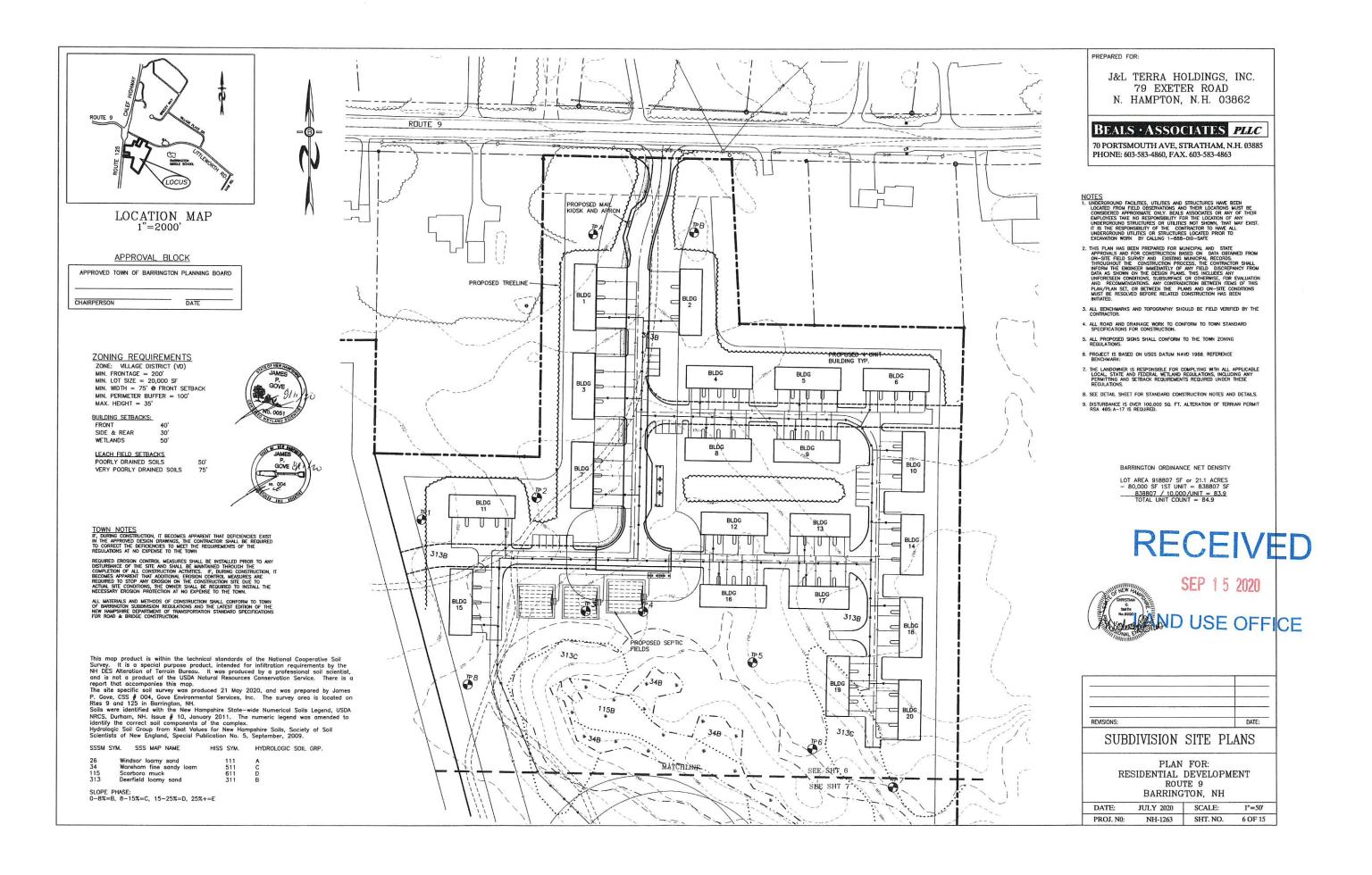


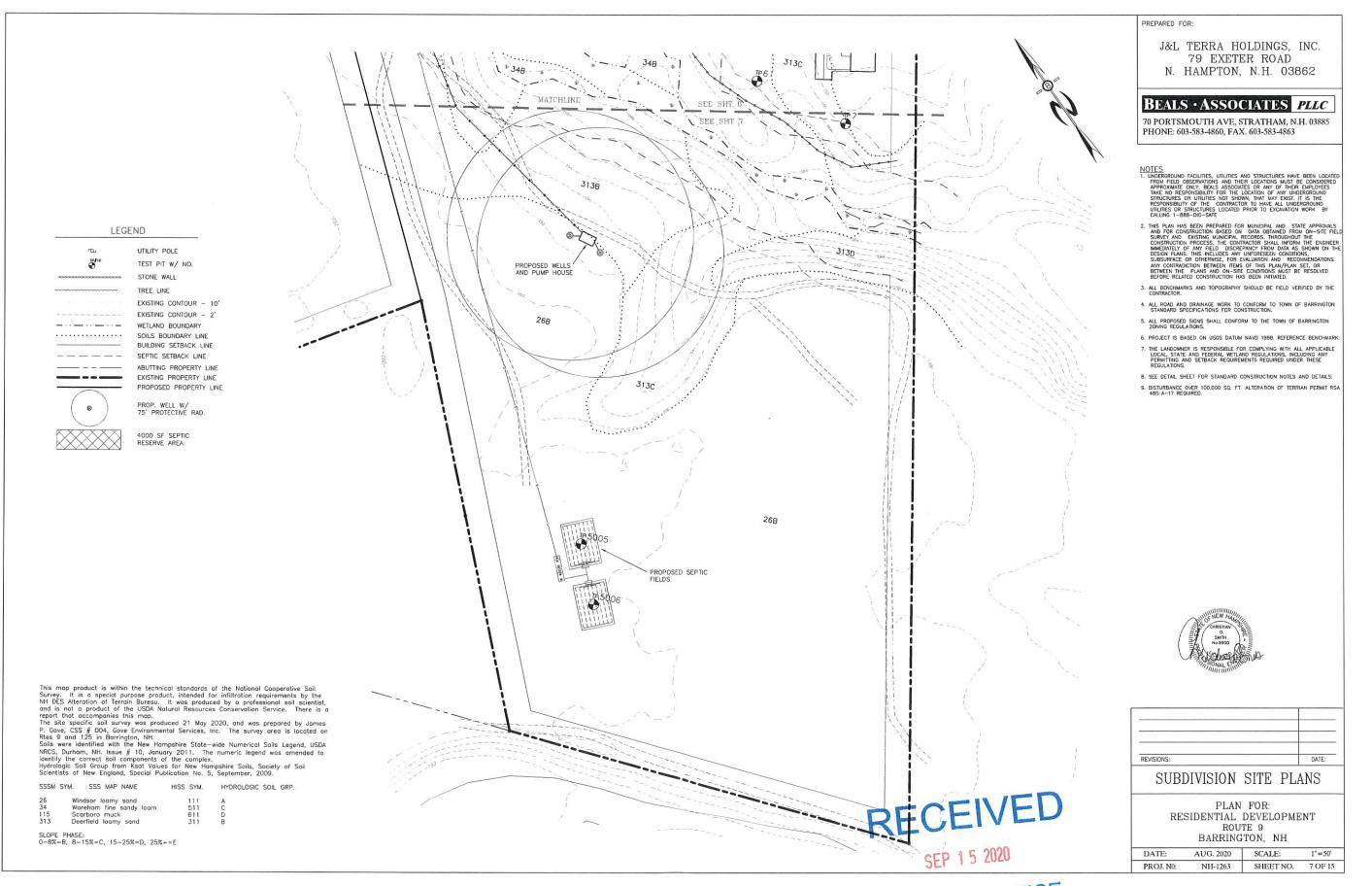
SCALE: 1"= 100' DATE: SEPTEMBER 3, 2020

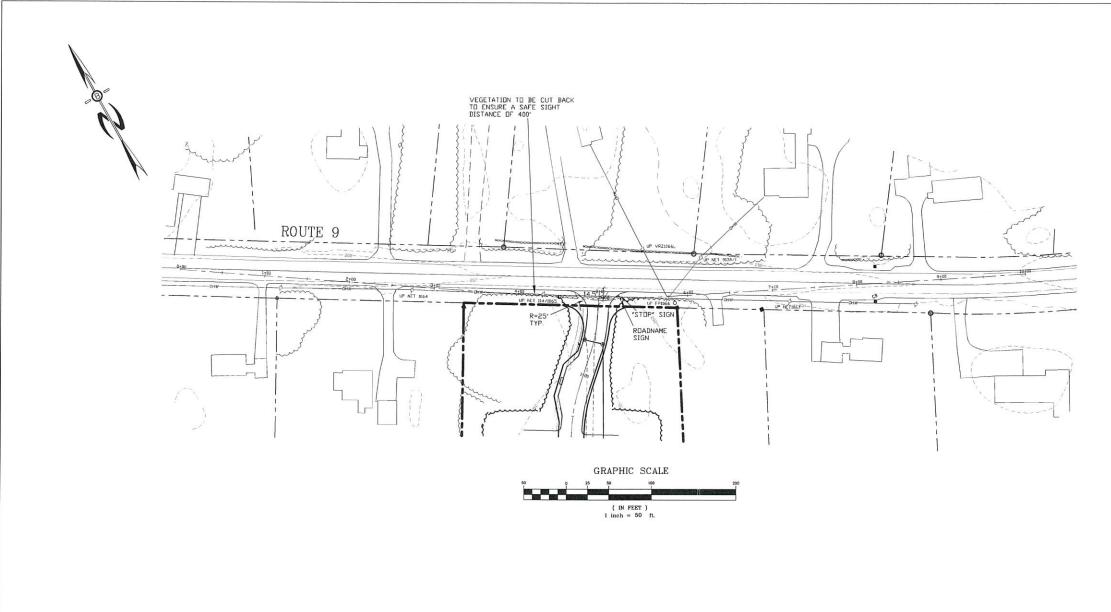
#### DAVID W. VINCENT, LLS

LAND SURVEYING SERVICES PO BOX 1622 DOVER, NH 03821 TEL/FAX (603) 664-5786









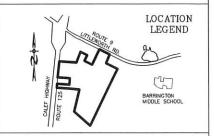
PREPARED FOR:

J&L TERRA HOLDINGS, INC. 79 EXETER ROAD

N. HAMPTON, N.H. 03862

# BEALS · ASSOCIATES PLLC

70 PORTSMOUTH AVE, STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863



- 1. ALL ELECTRICAL, TELEPHONE, CABLE TELEVISION AND ALARM LINES TO BE UNDERGROUND. THE SIZE AND LOCATION IS TO BE PLACED OUTSIDE OF THE RICHT-OF-WAY AS PER TOWN OF BRENTWOOD TYP, ROADWAY SECTION ADDENDUM A SUBDIVISION REGULATIONS, WITH REVIEW AND APPROVAL BY THE TOWN OF BRENTWOOD TOWN ENGINEER. LOW PROFILE UTILITY BOX STRUCTURES SHALL BE USED TO THE GREATEST EXTENT.

  2. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR, ENGINEER TO BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY.

- 2. ALL BENGHMARKS AND IOPOGRAPHY SHOULD BE HELD VERHIED BY THE CONTRACTOR, ENGINEER TO BE NOTHED IMMEDIATELY OF ANY DISCREPANCY.

  3. ALL CONSTRUCTION METHODS AND MATERIALS WILL CONFORM TO THE TOWN OF BARRINGTON STANDARD SPECIFICATIONS AND TO N.H.D.O.T. STANDARDS AND REGULATIONS.

  4. ALL DRAINAGE STRUCTURES AND SWALES WILL BE BUILT AND STABILIZED PRIOR TO HAWNS RUN-OFF DIRECTED TO THEM.

  5. SEE DETAIL SHEETS FOR STANDARD CONSTRUCTION DETAILS.

  6. CONTRACTOR TO HAWNS TOWN OF STANDARD CONSTRUCTION DETAILS.

  8. CHOWN ON PLANS, AND AS FOUND IN THE STORM WATER MANAGEMENT, AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE. DATED AUGUST 1992.

  7. NATURAL VEGETATED FILTER STRIPS ARE TO REMAIN WOODED.

  8. CULVETTS SHOULD BE MAINTAINED BI-ANNUALLY.

  9. SEDIMENT TRAPS ARE TO BE INSTALLED AT ALL PIPE INLETS UNTIL SITE IS STABILIZED.



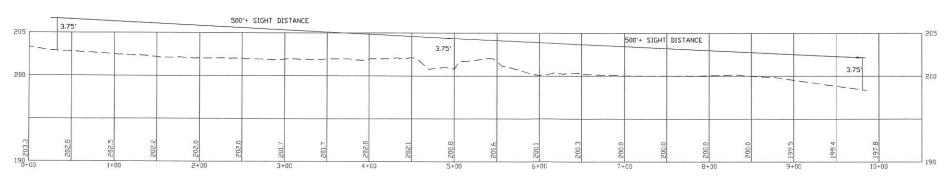
PROFILE SCALES:

HORIZONTAL: 1"=50' VERTICAL: REVISIONS:

HIGHWAY ACCESS PLAN-H1

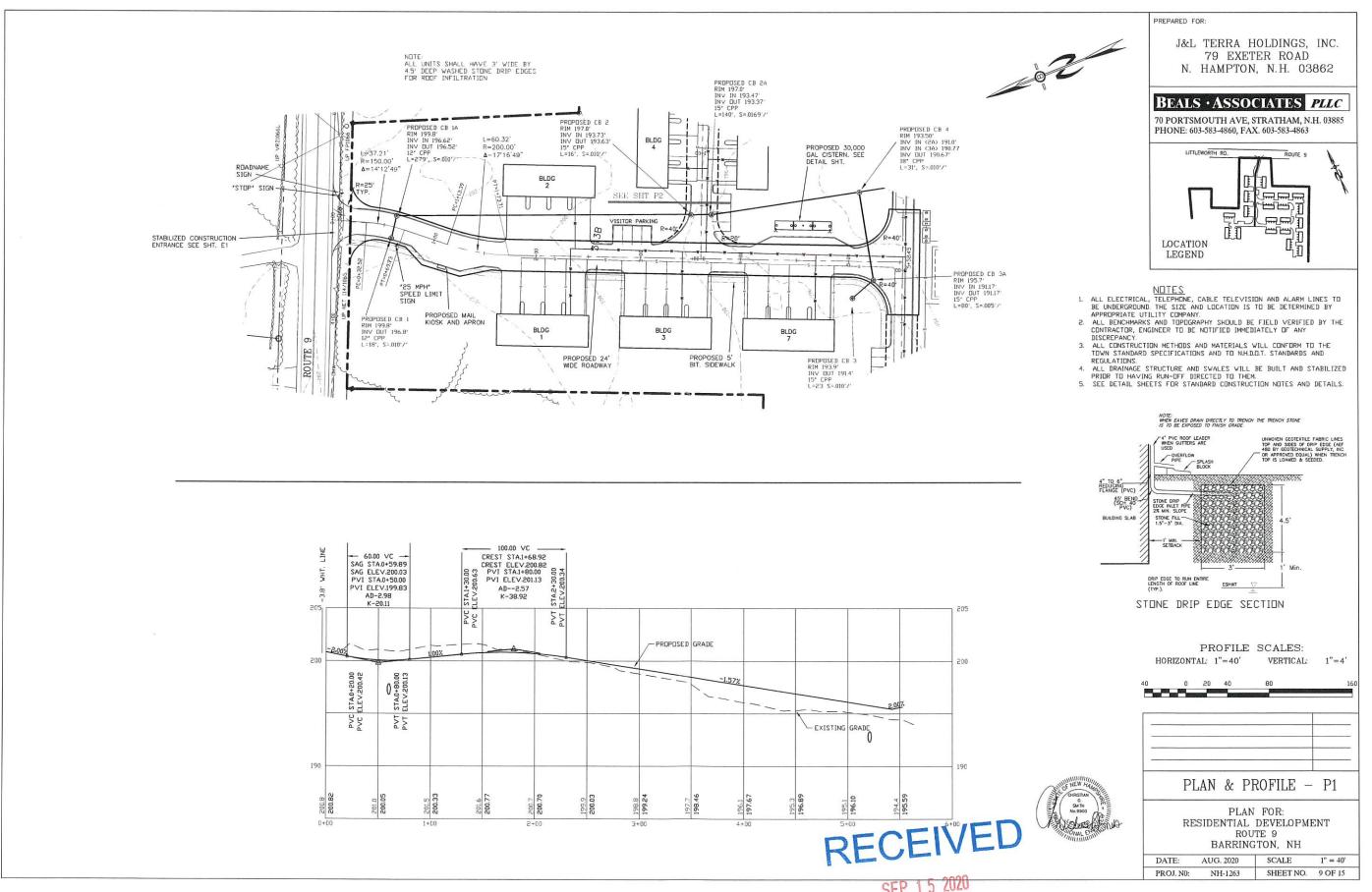
PLAN FOR: RESIDENTIAL DEVELOPMENT ROUTE 9 BARRINGTON, NH

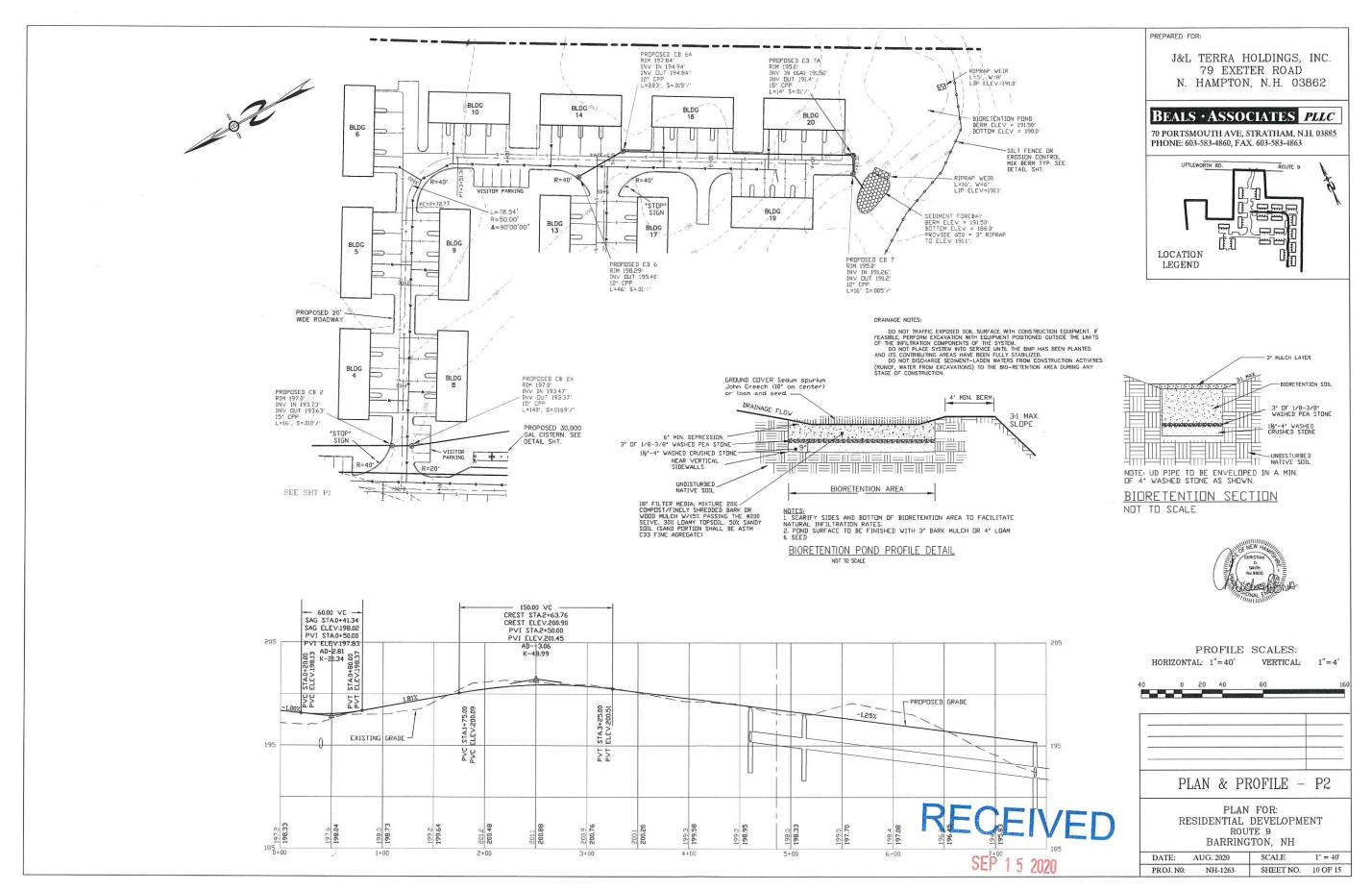
JULY 2020 SCALE 1" = 50' DATE: NH-1263 SHEET NO. 8 OF 15

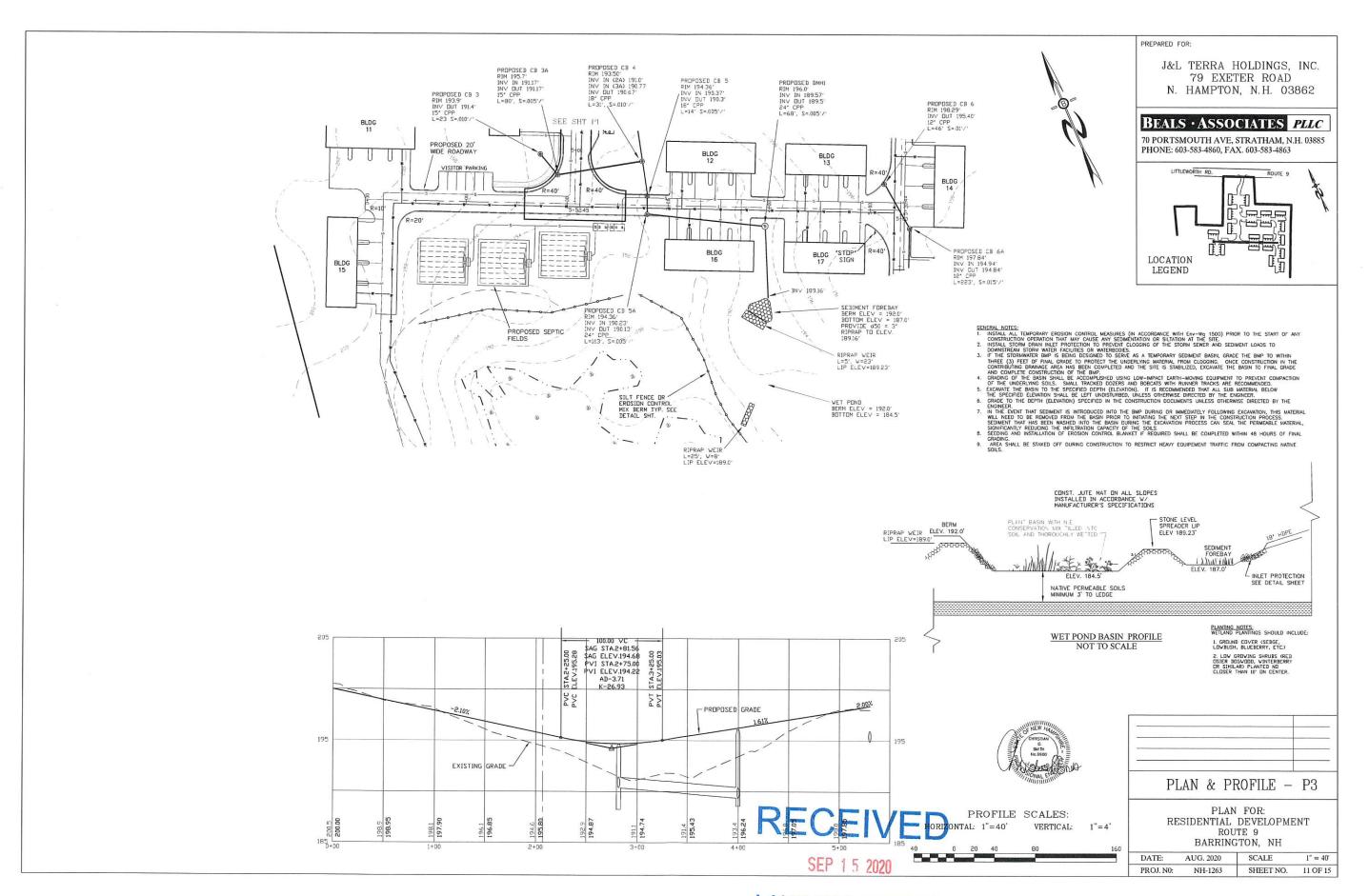


# RECEIVED

SEP 1 5 2020





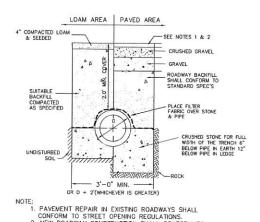


# STONE BERM LEVEL SPREADER Kasasasasas 3.0' CROSS SECTION TABLE 4-13-GRABATION OF STONE FOR LEVEL BERM 7. BY WEIGHT PASSING SQUARE MESH SIEVE SEIVE DESIGNATION (INCHES ISOMETRIC VIEW SEIVE DESIGNATION (INCHES)

- 1. CONSTRUCT THE LEVEL SPREADER LIP ON A 0% GRADE TO INSURE UNIFORM SPREADING OF RUNOFF.
- 2. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL AND NOT ON FILL.
- 3. THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING EXCELSIOR ENFORCER MATTING BENEATH THE STONE. EACH STRIP SHALL OVERLAP BY AT LEAST SIX INCHES.

LEVEL SPREADER

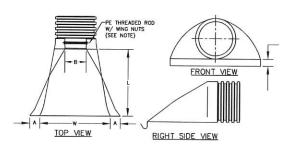
- THE FLOW FROM THE LEVEL SPREADER SHALL OUTLET ONTO STABILIZED AREAS. WATER SHOULD NOT RE-CONCENTRATE IMMEDIATELY BELOW THE SPREADER.
- 5. MAINTENANCE: THE LEVEL SPREADER SHOULD BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE IF THE LIP HAS BEEN DAMAGED AND THE DESIGN CONDITIONS HAVE NOT CHANGED. ANY DETRIMENTAL SEDIMENT ACCUMULATION SHOULD BE REMOVED. IF STONE REMOVAL HAS TAKEN PLACE ON THE LIP, THEN THE DAMAGE SHOULD BE REPAIRED.



# TYPICAL DRAINAGE TRENCH DETAIL

CONFORM TO STREET OPENING REGULATIONS.

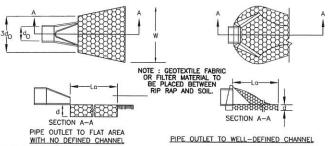
2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPEC'S.



PART No.	PIPE SIZE	А	B(MAX)	н	L	w
1510-NP	15"	6.5"	10"	6.5"	25"	29"
	375 mm	165 mm	254 mm	165 mm	635 mm	735 mm
1810-NP	18"	7.5"	15"	6.5"	32"	35"
	450 mm	190 mm	380 mm	165 mm	812 mm	890 mm
2410-NP	24"	7.5"	18"	6.5"	36"	45"
	600 mm	190 mm	450 mm	165 mm	900 mm	1140 mm
3010-NP	30" 750 mm	10.5" 266 mm	N/A	7.0" 178 mm	53" 1345 mm	68" 1725 mm
3610-NP	36" 900 mm	10.5" 266 mm	N/A	7.0" 178 mm	53" 1345 mm	68" 1725 mm

PE THREADED ROD W/ WING NUTS PROVIDED FOR END SECTIONS 15"-24". 30" & 36" END SECTIONS TO BE WELDED PER MANUFACTURER'S RECOMMENDATIONS.

ADS N-12 FLARED END SECTIONS
NOT TO SCALE (ALL DIMENSIONS ARE NOMINAL)



WITH NO DEFINED CHANNEL

CONSTRUCTION SPECIFICATIONS

1. THE SUB GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.

2. THE ROCK OR GRAVEL USED FOR FILTER OF RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION. 3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP RAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC, ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.

4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED

TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGRECATION OF THE STONE SIZES.

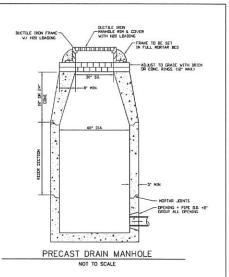
5. STONE FOR RIRAP SHALL BE ANGULAR OR SUBANGULAR. THE STONES SHOULD BE SHAPED SO THAT THE LEAST DIMENSION OF THE STONE FRAGMENT SHALL BE NOT LESS THAN ONE—THIRD OF THE GREATEST DIMENSION OF THE FRAGMENT.

6. FLAT ROCKS SHALL NOT USED FOR RIP RAP. VOIDS IN THE ROCK RIPRAP SHOULD BE FILLED WITH SPALLS AND SMALLER ROCKS.

MAINTENANCE MAINTENANCE

1. THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIP RAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBTIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO OUTLET PROTECTION.

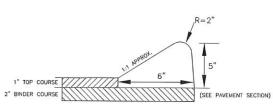
# NHDOT TYPE A FRAME TO BE SET IN FULL MORTAR BED -ADJUST TO GRADE VITH BRICK OR PRE-CAST CONC. RINGS (12' MAX.) PRECAST CATCH BASIN NOT TO SCALE



PIPE DUTLET PROTECTION

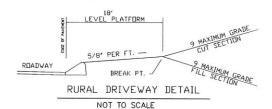
TABLE 7-24RECOMMENDED	RIP RAP	GR	ADATIO	N RANGES
THICKNESS OF RIP RAP = (	0.50 FEET			
d50 SIZE= 0.50	FEET		6	INCHES
% DF WEIGHT SMALLER THAN THE GIVEN 050 SIZE		DF	STONE	(INCHES)
100%	9			12
85%	8			11
50%	6			9
15%	2			3

TABLE 7-24-RECOM	MENDED RIP	RAP GRA	ADATION	RANGES
THICKNESS OF RIP	RAP = 0.75	FEET		
d50 SIZE=	0.75	FEET	9	INCHES
% DF WEIGHT SMAL THAN THE GIVEN o		SIZE OF FROM	STONE	INCHES)
100%		14		18
85%		12		16
50%		9		14
15%		3		5

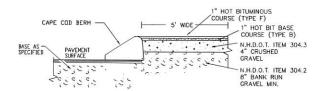


THE BIT. CURBING IS TO BE CONSTRUCTED OF A POLYFIBER CURB MIX CONTAINING 59.2% SAND, 27.6% 3/8" STONE, 9.2% 1/2" STONE, 0.3% FIBERS, AND 3.0% ASPHALT.

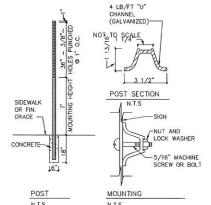
CAPE COD BERM DETAIL NOT TO SCALE



SIGN NUMBER	SIGN	-	F SIGN HEIGHT	DESCRIPTION	MOUNT TYPE	MOUNT HEIGHT
R1-1	STOP	30"	30"	WHITE ON RED	CHANNEL	7'-0"
R2-1	SPEED LIMIT 25	18"	24"	BLACK ON WHITE	CHANNEL	7'-0"
41-0342		30"	30"	BLACK ON YELLOW	CHANNEL	8'-6"
W14-2	NO OUTLET	24"	24"	BLACK ON YELLOW	CHANNEL	7'-0"

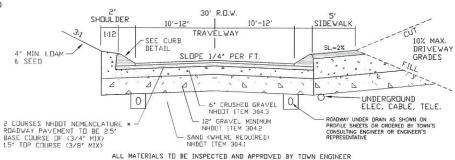


BIT. SIDEWALK DETAIL NOT TO SCALE



SEP 15 2020

LAND USE OFFICE



ALL MATERIALS TO BE INSPECTED AND APPROVED BY TOWN ENGINEER AND MEET NHOOT STANDARDS.

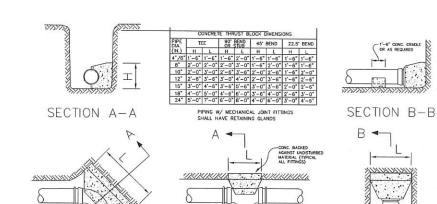
TOWN MAY REQUIRE UNDERDRAIN OR ADDITIONAL DRAINAGE TO INCLUDE OVER EXCAVATION OF UNSUITABLE MATERIALS AND INSTALLATION OF GEOTEXTILE FABRIC. SEE ADDITIONAL NOTES ON DETAIL SHEETS.

TYPICAL CROSS SECTION

CONSTRUCTION DETAILS D1

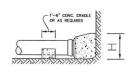
PLAN FOR: RESIDENTIAL DEVELOPMENT ROUTE 9 BARRINGTON, NH

DATE:	AUG. 2020	SCALE	NTS'
PROJ. N0:	NH-1263	SHEET NO.	12 OF 15



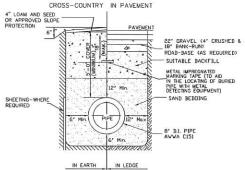
TAININI

PLAN

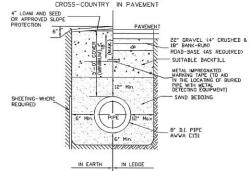


В

PLAN



FOR WATER SYSTEM



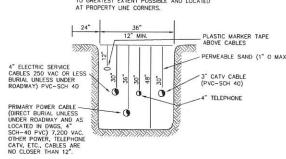
TYPICAL TRENCH DETAIL

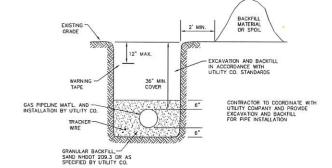
# THRUST BLOCK DETAILS

PLAN

NOTE: ALL UTILITIES SHALL BE REVIEWED AND APPROVED BY APPROPRIATE UTILITY COMPANY.

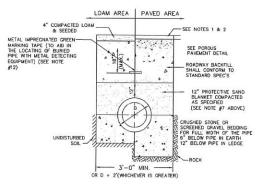
SERVICE BOX CONNECTIONS SHALL BE "FLUSH MOUNT" TO GREATEST EXTENT POSSIBLE AND LOCATED AT PROPERTY LINE CORNERS.





GAS TRENCH DETAIL

# UTILITY TRENCH DETAIL

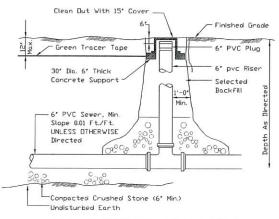


NOTE:

1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.

2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO CONTROL CONFORM TO CONFORM TO

TYPICAL SEWER TRENCH DETAIL



SEWER SERVICE CLEAN OUT

4' DIAMETER PRECAST CONCRETE MANHOLE TO MEET SAME CONSTRUCTION REQUIREMENTS AS TYPICAL SEVER MANHOLE DETAIL RESSURE HOSE CONNECTION 2" GATE VALVE PROVIDE 2"x2"x2" TEE 2" PVC FORCE MAIN TRANSITION TO DUCTILE IRON PRIOR TO MANHOLE CONCRETE SUPPORT

SEP 15 2020

CURB STOP

OPEN LEF

TYPICAL WATER SERVICE CONNECTION

-SERVICE PIPE 3/4

TYPE "K" COPPER TUBING — FLARED CONNECTIONS INSTALL WITH GOOSE NECK TO PROVIDE FLEXIBILITY

PREPARED FOR:

J&L TERRA HOLDINGS, INC. 79 EXETER ROAD N. HAMPTON, N.H. 03862

## BEALS · ASSOCIATES PLLC

70 PORTSMOUTH AVE, STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863

#### NOTES

- ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE: REFILL WITH BEDDING MATERIAL. (SEE NOTE 6 ALSO)
- BEDDING: MINIMUM 12" SAND BLANKET AS SPECIFIED AND REMAINING FILL AS SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C-33 STONE SIZE No. 67

1 INCH SCREEN 3/4 INCH SCREEN 3/8 INCH SCREEN No. 4 SIEVE No. 8 SIEVE

WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, GRADED SCREENED GRAVEL OR CRUSHED STONE 3/4 INCH TO 1-1/2 INCH SHALL BE USED.

- SUITABLE MATERIAL IN ROADS, ROAD SHOULDERS, WALKWAYS, AND TRAVELED WAYS: SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION.
- 4) FOR CROSS COUNTRY CONSTRUCTION: BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

#### SEPERATION NOTES:

- WATER MAIN RELATIONS TO SHALL BE IN ACCORDANCE WITH THE "RECOMMENDED STANDARDS FOR WATER WORKS" SO-CALLED TEN STATE STANDARDS AND NEW HAMPSHIRE WATER SUPPLY AND POLLUTION CONTROL DESIGN STANDARDS.
- WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWERS. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IF THIS DISTANCE CANNOT BE OBTAINED, THEN THE PIPES SHALL BE INSTALLED IN A SEPERATE TRENCH WITH A VERTICAL SPERATION AT LEAST 18 INCHES APART.



REVISIONS:	DATE:

### UTILITY DETAILS

PLAN FOR: RESIDENTIAL DEVELOPMENT ROUTE 9 BARRINGTON, NH

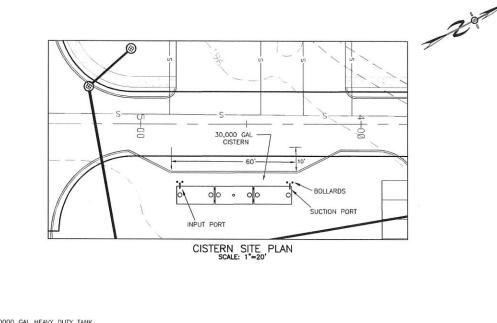
DATE: AUG. 2020 SCALE 1'' = 40'SHEET NO. 13 OF 15

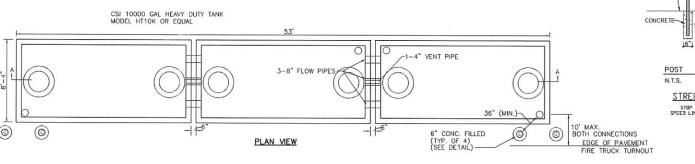
#### CISTERN SPECIFICATIONS

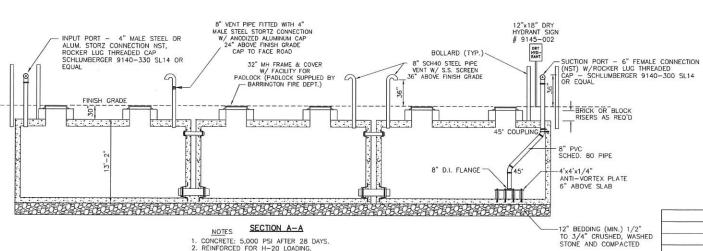
- 1. THE CISTERN SHALL BE DESIGNED TO BE TROUBLE FREE, AND IT SHALL BE DESIGNED TO LAST 50
- 2. THE MINIMUM CAPACITY SHALL BE 10,000 GALLONS. DEPENDING ON THE DEVELOPMENT LAYOUT/CONFIGURATION, ADDITIONAL GALLON REQUIREMENTS MAY BE IMPOSED AT THE DISCRETION OF THE FIRE CHIEF. ALL EXCEPTIONS, ADDITIONS, OR DELETIONS WILL BE IN WRITING
- 3. THE SUCTION CAPACITY SHALL BE CAPABLE OF DELIVERING 1,000 GALLONS PER MINUTE (GPM) FOR THREE-QUATERS OF THE CISTERN CAPACITY.
- 4. THE ENTIRE CISTERN AND APPURTENANCES SHALL BE RATED FOR HS-20 HIGHWAY LOADING.
  5. DRAWINGS OF THE DESIGN ARE FOR ESTIMATING GENERAL REQUIREMENT AND DESIGN PURPOSES ONLY
- AND ARE NOT INTENDED FOR USE AS DESIGN.

  6. EACH CISTERN SHALL BE DESIGNED, SITED TO THE PARTICULAR LOCATION, STAMPED BY A
- REGISTERED ENGINEER. AND APPROVED BY THE FIRE CHIEF
- 7. ALL SUCTION AND FILL PIPING SHALL BE AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM) SCHEDULE 40 STEEL. ALL VENT PIPING SHALL BE ASTM SCHEDULE 40 STEEL WITH WELDED JOINTS.
  ALL PIPING LOCATED WITHIN THE TANK SHALL BE ASTM SCHEDULE 40 STEEL WITH WELDED JOINTS.
  ALL PIPING LEADING FROM THE TANK TO THE HYDRANT SHALL BE ASTM SCHEDULE 40 STEEL.
- 8. THE FINAL SUCTION CONNECTION SHALL BE FIVE INCH PUMPER NOZZLE WITH A CAP. THE SUCTION PIPE SHALL BE BRACED TO ENSURE DURABILITY DURING PUMPING OPERATIONS. THE FIRE CHIEF SHALL APPROVE BRACE CONFIGURATION AND INSTALLATION. THE SUCTION PIPE CONNECTION SHALL BE TVENTY-FOUR INCHES ABOVE THE LEVEL OF THE VEHICLE PAD WHERE VEHICLE WHEELS WILL BE LOCATED WHEN THE CISTERN IS IN USE.
- 9. THE FILLER CONNECTION SHALL BE INTALLED INTO THE EIGHT INCH VENT WITH 4" MALE STEEL STORZ FITTING. THIS FITTING SHALL BE 24" ABOVE FINISH GRADE AND FACE THE ROAD. A THIRTY-TWO INCH DIAMETER MANHOLE WITH COVER WILL BE LOCATED ON TOP OF THE CISTERN. THE CONFIGURATION OF THIS MANHOLE SHALL ALLOW THE UNIT TO BE SECURED WITH TWO PADLOCKS AND SHALL BE
- APPROVED BY THE FIRE CHIEF. THE PADLOCKS WILL BE SUPPLIED BY THE FIRE DEPARTMENT.

  10. THE DISTANCE FROM THE BOTTOM OF THE SUCTION PIPE TO THE PUMPER CONNECTION SHALL NOT EXCEED FOURTEEN FEET VERTICAL
- 11. ALL HORIZONTAL SUCTION PIPING SHALL SLOPE SLIGHTLY UPHILL TOWARD THE PUMPER CONNECTION. 12. BEDDING FOR THE CISTERN SHALL CONSIST OF A MINIMUM OF TWELVE INCHES OF 3/4" TO 1 1/2" WASHED PEA STONE, COMPACTED. NO FILL SHALL BE USED UNDER THE STONE. OVER EXCAVATION SHALL BE FILLED WITH THE SAME STONE BEDDING MATERIAL.
- 13. ALL BACKFILL MATERIALS SHALL BE SCREENED GRAVEL WITH NO STONES LARGER THAN SIX INCHES AND SHALL BE COMPACTED TO 95 PERCENT OF ITS ORIGINAL VOLUME IN ACCORDANCE WITH ASTM D 1557. 16. THE TOP OF CISTERN SHALL BE INSULATED WITH VERMIN RESISTANT FOAM INSULATION AND TWO FEET OF BACKFILL WITH A MINIMUM WEIGHT OF 120 PCF, COMPACTED. FOAM USED FOR THIS INSTALLATION SHALL BE CLOSED CELL POLYURETHANE FOAM WITH AN INSULATION FACTOR OF R=5 PER INCH. ALL BACKFILL SHALL EXTEND TEN FEET BEYOND THE EDGE OF THE VEHICLE PAD AND THEN HAVE A MAXIMUM OF 3:1 SLOPE, LOAM AND SEEDED.
- 14. BEFORE ANY BACKFILLING IS DONE THE ENTIRE CISTERN SHALL BE COMPLETED AND INSPECTED BY
- 15. AFTER BACKFILLING, BOLLARDS OR LARGE STONES SHALL BE PLACED TO PROTECT. THE TANK AND APPURTENANCES.
- 16. THE PITCH OF THE SHOULDER AND VEHICLE PAD FROM THE EDGE OF THE PAVEMENT TO THE PUMPER SUCTION CONNECTION SHALL BE ONE PERCENT TO THREE PERCENT DOWNGRADE
- 17. THE SHOULDER AND VEHICLE PAD SHALL BE OF A SUFFICIENT LENGTH TO ALLOW CONVENIENT ACCESS TO THE SUCTION CONNECTION WHEN THE PUMPER IS SET AT 45 DEGREES TO THE ROAD. THE SHOULDER AND VEHICLE PAD SECTION SHALL CONSIST OF 3" BITUMINOUS PAVING, REFER TO SITE PLAN FOR REQUIREMENTS.
- 18. THE SUCTION FITTING SHALL BE LOCATED BETWEEN 22 AND 24 FEET FROM THE NEAREST RUNNING EDGE OF ROAD PAVEMENT. TWO CONCRETE FILLED STEEL BOLLARDS SHALL BE PLACED IN A
  MANNER TO PROTECT THE HYDRANT. THE BASE OF THESE BOLLARDS SHALL EXTEND BELOW THE FROST LINE. THE UPPER PORTION OF THE BOLLARDS SHALL EXTEND THIRTY SIX INCHES ABOVE THE LEVEL OF THE VEHICLE PAD WHERE VEHICLE WHEELS WILL BE LOCATED WHEN THE CISTERN IS IN USE
- 19. ALL CONSTRUCTION, BACKFILL, AND GRADING MATERIALS SHALL BE IN ACCORDANCE WITH PROPER CONSTRUCTION PRACTICES AND SHALL BE ACCEPTABLE TO THE FIRE CHIEF. 20. THE FIRE CHIEF (OR REPRESENTATIVE) AND THE ENGINEER'S INSPECTOR WILL BE NOTIFIED BY THE
- CONTRACTOR TO OBSERVE THE FOLLOWING POINTS OF INSTALLATION:
  A. EXCAVATION COMPLETE.
- B. CRUSHED STONE INSTALLED AND COMPACTED
- BACKFILLING COMPLETE PRIOR TO PLACEMENT OF INSULATION.
- D. PLACEMENT OF INSULATION.
- E. START AND FINISH OF LEAKAGE TEST.
  F. PIPING MANWAYS AND BOLLARDS IN PLACE AND PAINTED.
- G. ALL BACKFILLING LOAM, SEED, ETC. COMPLETE WITH TURNOUT GRAVEL IN PLACE AND GRADED. H. PAVEMENT COMPLETE, AND ALL OTHER WORK 100% COMPLETE.
- 21. THE FIRE CHIEF SHALL BE NOTIFIED OF THE DATE THAT SITE WORK IS TO BEGIN.
- 22. ANY EXCEPTION, ADDITIONS, OR DELETIONS ARE DATED AND NOTED BELOW: 23. CONCRETE MUST HAVE A MINIMUM OF 150 PCF.
- 24. STONE AND GRAVEL BACKFILL MUST HAVE A MINIMUM OF 120 PCF

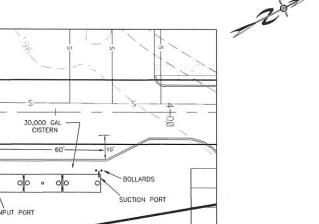






- 3. JOINTS SEALED WATER TIGHT.
  4. ALL BELOW GRADE EXTERIOR SURFACES OF THE TANK SHALL BE COATED WITH
- S. CISTERN INSTALLATION MUST CONFORM WITH ALL LOCAL FIRE DEPARTMENT

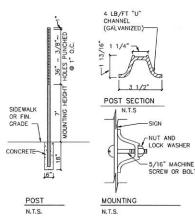
PROPOSED 30,000 GAL. FIRE CISTERN DETAIL



BEALS · ASSOCIATES PLLC 70 PORTSMOUTH AVE, STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863

J&L TERRA HOLDINGS, INC. 79 EXETER ROAD N. HAMPTON, N.H. 03862

PREPARED FOR:



STREET SIGN DETAIL STOP SIGN (RI-1) 30" x 30" SPEED LIMIT SIGN (R2-1) 24" x 30"



FIRE CISTERN DETAILS

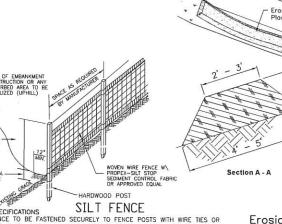
PLAN FOR: RESIDENTIAL DEVELOPMENT ROUTE 9 BARRINGTON, NH

AUG. 2020 SCALE NTS DATE: SHEET NO. 14 OF 15

LAND USE OFFICE

WIRE SCREEN SHALL BE PLACED BETWEEN STONE AND BLOCKS TO PREVENT THE AGGREGATE FROM BEING WASHED INTO THE STRUCTURE

LIFTING STRAPS



Mix material should consist of 30–50% large (1–3") particles. The organic matter content should be 25%–65%, dry weight basis. The organic matter may originate from a variety of vegetative sources, but needs to be fibrous and elongated. The mix shall be free of silt, clay, fine sand, refuse and contaminants or any material toxic to plant growth. Erosian Control Mix berms are effective filters for overland flow conditions and should not be used to filter concentrated flow such as that found in drainage ditchs, streams, etc.

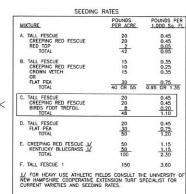
Mix material should consist of 30-50%

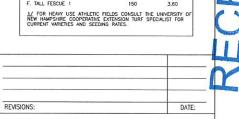
RECOMMENDED MAINTENANCE SCHEDULE

-IF THERE HAVE BEEN NO MAJOR EVENTS, SILTSACK SHOULD BE INSPECTED EVERY 2-3 WEEKS

SILTSACK DETAIL

Erosion Control Mix Berm

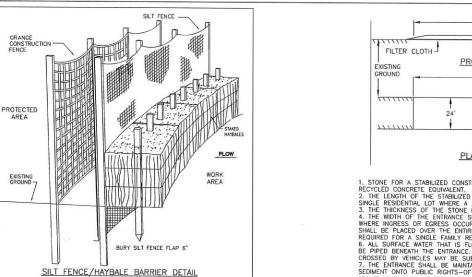




**EROSION & SEDIMENTATION** 

PLAN FOR: RESIDENTIAL DEVELOPMENT ROUTE 9 BARRINGTON, NH

		,	
DATE:	AUG. 2020	SCALE	NTS
PROJ. N0:	NH-1263	SHEET NO.	15 OF 15



#### TEMPORARY EROSION CONTROL MEASURES

1. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT NO MORE THAN 5 ACRES OF LAND SHALL BI EXPOSED BEFORE DISTURBED AREAS ARE STABILIZED.

THIS METHOD TO BE USED AT ALL LOCATIONS WHERE CONSTRUCTION IS

EAROSED BEFORE DISTORBED AREAS ARE STABILIZED."

2. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED OR DIRECTED BY THE ENGINEER ALL DISTURBED AREAS SHALL BE RETURNED TO ORIGINAL GRADES AND ELEVATIONS.

3. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 4" OF LOAM AND SEEDED WITH NOT LESS THAN 1.10 POUNDS OF SEED

PER 1000 SQUARE FEET OF AREA. (48 POUNDS PER ACRE) SEE SEED SPECIFICATIONS THIS SHEET

4. SILT FENCES AND OTHER EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RAIN EVENT GREATER THAN 0.5" DURING THE LIFE OF THE PROJECT. ALL DAMAGED AREAS SHALL BE REPAIRED, SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED D DISPOSED OF. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED AND THE

AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.

6. AREAS MUST BE SEEDED AND MULCHED WITHIN 3 DAYS OF FINAL GRADING, PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL

GRADING, OR TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF SOIL

WITHIN 25' OF WETLAND AREAS.

- ORAJINA, UN TEMPORANILE STABILIZEU WITHIN 30 JANS OF INITIAL DISTURBANCE OF SOIL.

  \* AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCUPRED:

   BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.

   A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.

   A MINIMUM OF 3 INCHES OF NON-ERGONE WATERIAL SUCH AS RIPRAP HAS BEEN INSTALLED.

   EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

# CONSTRUCTION SPECIFICATIONS

- STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
  CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED.
- 3. WHEN TIMBER STRUCTURES ARE USED, THE TIMBER SHALL EXTEND AT LEAST 18" INTO THE SOIL
- WHEN IMBER STRUCTURES ARE USED, THE TIMBER SHALL EXTEND AT LEAST 18" INTO THE SOIL.
   STRAW BALES SHALL BE ANCHORED INTO THE SOIL USING 2" X 2" STAKES DRIVEN THROUGH THE BALES AND AT LEAST 18 INCHES IN TO THE SOIL.
   SEEDING, FERTILIZING, AND MULCHING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROPRIATED VEGETATIVE BMP.
   STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.
- 6. STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED. THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL TAKE PRECAUTIONS AND INSTRUCTIONS FROM THE PLANNING DEPARTMENT IN ORDER TO PREVENT, ABAIE AND CONTROL THE EMISSION OF FUGITIVE DUST INCLUDING BUT NOT LIMITED TO WEITING, COVERING, SHIELDING, OR VACUUMING.
  8. THE NH COMMISSIONER OF AGRICULTURE PROHIBITS THE COLLECTION, POSSESSION, IMPORTATION, TRANSPORTATION, SALE, PROPAGATION, TRANSPLANTATION, OR CULTIVATION OF PLANTS BANNED BY NH LAW RSA 430:53 AND NH CODE ADMINISTRATIVE PULES AGR 3800. THE PROJECT SHALL MEET ALL REQUIREMENTS AND THE INTENT OF . RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES
  9. THE CONSTRUCTION SITE OPERATOR AND OWNER SHALL SUBMIT A NOTICE OF INTENT (NO!) TO USEPA, WASHINGTON, DC, STORMWATER NOTICE PROCESSING CENTER AT LEAST FORTEEN DAYS PRIOR TO COMMENCEMENT OF WORK ON SITE. EPA WILL POST THE NOI AT http://clouble.org.or//ndes/s/cor/modes/for//noispearche/ma. AUTHORIZATION IS GRANTED LINDER THE

http://cfpubl.epa.gov/npdes/stormwater/noi/noisearch.cfm. AUTHORIZATION IS GRANTED UNDER THE PERMIT ONCE THE NOI IS SHOWN IN "ACTIVE STATUS".

# CONSTRUCTION SEQUENCE

. CUT AND REMOVE TREES IN CONSTRUCTION AREAS AS REQUIRED OR DIRECTED.

1. CUT AND REMOVE TREES IN CONSTRUCTION AREAS AS REQUIRED ON DIRECTED.

2. CONSTRUCT AND/OR INSTALL TEMPORARY AND PERMANENT SEDIMENT EROSION AND DETENTION CONTROL FACILITIES

AS REQUIRED. EROSION, SEDIMENT AND DETENTION CONTROL FACILITIES SHALL BE INSTALLED AND STABILIZED PRIOR

TO ANY EARTH MOVING OPERATION AND PRIOR TO DIRECTING RUNOFF TO THEM.

3. CLEAR, CUT, GRUB AND DISPOSE OF DEBRIS IN APPROVED FACILITIES. STUMPS AND DEBRIS ARE TO BE REMOVED

FROM SITE AND DISPOSED OF PER STATE AND LOCAL REGULATIONS.

4. EXCAVATE AND STOCKPILE TOPSOIL /LOAM, ALL AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.

5. CONSTRUCT TEMPORARY CULVERTS AS REQUIRED OR DIRECTED.

6. CONSTRUCT THE ROADWAY/DRIVEWAYS AND ITS ASSOCIATED DRAINAGE STRUCTURES ALL ROADWAYS PARKING AREAS, AND CUT/FILL SLOPES SHALL BE STABILIZED AND/OR LOAMED AND SEEDED WITHIN 72-HOURS OF ACHIEVING FINISH GRADE AS APPLICABLE.

ARCAS, AND COLYTIL SLOPES STARLE BE STABILIZED AND/OR LOAMED AND SECURE WHITIIN 72-HOURS OF ACHIEVING FINISH GRADE AS APPLICABLE.

7. INSTALL PIPE AND CONSTRUCTION ASSOCIATED APPURTENANCES AS REQUIRED OR DIRECTED. ALL DISTURBED AREAS SHALL STABILIZED IMMEDIATELY AFTER GRADING.

8. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES AND DISTURBED AREAS SHALL BE SEEDED OR MULCHED AS REQUIRED, OR DIRECTED.

9. DAILY OR AS REQUIRED, CONSTRUCT TEMPORARY BERNS, DRAINAGE CHECK DAMS, DITCHES, SEDIMENT TRAPS, ETC. TO PREVENT EROSION ON THE SITE AND PREVENT ANY SILTATION OF ABUTTING WATERS OR PROPERTY.

10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION

11. COMPLETE PERMANENT SEEDING AND LANDSCAPING

12. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE ESTABLISHED THEMSELVES AND SITE IMPROVEMENTS ARE COMPLETE. SMOOTH AND REVGESTARE ALL DISTURBED AREAS.

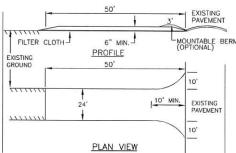
13. ALL SWALES AND DRAINAGE STRUCTURES WILL BE CONSTRUCTED AND STABILIZED PRIOR TO HAVING RUNOFF DIRECTED TO THEM.

RECTED TO THEM.

DIRECTED TO THEM.

14. FINISH PAVING ALL ROADWAYS/DRIVEWAYS.

15. LOT DISTURBANCE OTHER THAN THAT SHOWN ON THE APPROVED PLANS SHALL NOT COMMENCE UNTIL THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.



1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.

2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.

3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 16 INCHES.

4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER. 5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.

6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.

7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS—OF—WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT—OF—WAY MUST BE REMOVED.

# STABILIZED CONSTRUCTION ENTRANCE

### WINTER MAINTENANCE

1. ALL DISTURBED AREAS THAT DO NOT HAVE AT LEAST 85% VEGETATIVE COVERAGE PRIOR TO OCTOBER 15TH, SHALL BE STABILIZED BY APPLYING MULCH AT A RATE OF 3-4 TONS PER ACRE. ALL SIDE SLOPES, STEEPER THAN 4:1, THAT ARE NOT DIRECTED TO SWALES OR DETENTION BASINS, SHALL BE LINED WITH BIODEGRADABLE/PHOTODEGRADABLE "JUTE MATTING" (EXCELSIOR'S CURLEX II OR EQUAL). ALL OTHER SLOPES SHALL BE MULCHED AND TACKED AT A RATE OF 3-4 TONS PER ACRE. THE APPLICATION OF MULCH AND/OR JUTE MATTING SHALL NOT OCCUR OVER EXISTING SNOW COVER. IF THE SITE IS ACTIVE AFTER NOVEMBER 15TH, ANY SNOW THAT ACCUMULATES ON DISTURBED AREAS SHALL BE REMOVED. PRIOR TO SPRING THAW ALL AREAS WILL BE STABILIZED, AS DIRECTED ABOVE.

2. ALL SWALES THAT DO NOT HAVE FULLY ESTABLISHED VEGETATION SHALL BE EITHER LINED WITH TEMPORARY JUTE MATTING OR TEMPORARY STONE CHECK DAMS (APPROPRIATELY SPACED). STONE CHECK DAMS WILL BE MAINTAINED THROUGHOUT THE WINTER MONTHS. IF THE SWALES ARE TO BE MATTED WITH PERMANENT LINERS OR RIPRAP WITH ENCINEERING FABRIC, THIS SHALL BE COMPLETED PRIOR TO WINTER SHUTDOWN OR AS SOON AS THEY ARE PROPERLY

3. PRIOR TO OCT. 15TH ALL ROADWAY AND PARKING AREAS SHALL BE BROUGHT UP TO AND THROUGH THE BANK RUN GRAVEL APPLICATION. IF THESE AREAS' ELEVATIONS ARE PROPOSED TO REMAIN BELOW THE PROPOSED SUBGRADE ELEVATION, THE SUBGRADE METERAL SHALL BE ROUGHLY CROWNED AND A 3' LAYER OF CRUSHED GRAVEL SHALL BE PLACED AND COMPACTED. THIS WILL ALLOW THE SUBGRADE TO SHED RUNOFF AND WILL REDUCE ROADWAY EROSION. THIS CRUSHED GRAVEL DOES NOT HAVE TO CONFORM TO NH DOT 304.3, BUT SHALL HAVE BETWEEN 15-25% PASSING THE #200 SIEVE AND THE LARGEST STONE SIZE SHALL BE 2". IF THE SIZE IS ACTIVE AFTER NOVEMBER 15TH, ANY ACCUMULATED SNOW SHALL BE REMOVED FROM ALL ROADWAY AND PARKING AREAS.

4. AFTER OCTOBER 15TH, THE END OF NEW HAMPSHIRE'S AVERAGE GROWING SEASON, NO ADDITIONAL LOAM SHALL BE SPREAD ON SIDE SLOPES AND SWALES. THE STOCKPILES THAT WILL BE LEFT UNDISTURBED UNTIL SPRING SHALL BE SEEDED BY THIS DATE. AFTER OCTOBER 15TH, ANY NEW OR DISTURBED PILES SHALL BE MULCHED AT A RATE OF 3-4 TONS PER ACRE. ALL STOCKPILES THAT WILL REMAIN THROUGHOUT THE WINTER SHALL BE SURROUNDED WITH SILT

#### SEEDING SPECIFICATIONS

1. GRADING AND SHAPING

A. SLOPES SHALL NOT BE STEEPER THAN 2:1;3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.

2. SEEDBED PREPARATION A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.

KILLING OF THE PLANTS.

B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED.

AGRICULTURAL LIMESTONE, 2 TONS PER ACRE OR 100 LBS PER 1,000 SQ. FT..

NITROGEN(N), 50 LBS PER ACRE OR 1. 1 LBS PER 1,000 SQ.FT. PHOSPHATE(P205), 100 LBS PER ACRE OR 2, 2 LBS PER 1,000 SQ.FT

POTASH(K20), 100 LBS PER ACRE OR 2. 2 LBS PER 1,000 SQ.FT.

(NOTE: THIS IS THE EQUIVALENT OF 500 LBS PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS PER ACRE OF 5-10-10.)

B. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, ORILLING AND HYDROSEEDING, WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.

C. REFER TO TABLE(G-E1 THIS SHEET) FOR APPROPRIATE SEED MIXTURES AND TABLE(H-E1 THIS SHEET) FOR RATES OF SEEDING. ALL LEGUMES (CROWN VETCH, BIRDS FOOT TREFOIL, AND FLAT PEA) MUST BE INOCULANT. WITH THEIR SPECIFIC INOCULANT.

D. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 1.

4. MULCH

HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.

B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING. HAY OR STRAW MULCH SHALL BE PLACED AT A RATE OF 90 LBS PER 1000 SQ. FT.

5. MAINTENANCE TO ESTABLISH A STAND

PLANTED AREA SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH. B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY
THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIAL STAKE 2 TO 3 YEARS TO

C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

CONSTRUCTION SPECIFICATIONS

SIL | F LNCL

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES AND FILTER CLOTH SHALL BE FASTENED TO WOVEN WIRE EVERY 24" AT TOP MID AND BOTTOM SECTIONS AND BE EMBEDDED INTO GROUND A MINIMUM OF 8". 2. THE FENCE

POSTS SHALL BE A MINIMUM 48" LONG, SPACED A MAXIMUM 10' APART, AND DRIVEN A

MINIMUM OF 16" INTO THE GROUND.

3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THE ENDS OF THE FABRIC SHALL BE OVERLAPPED BY SIX INCHES, FOLDED AND STAPLED TO PREVENT SEDIMENT FROM HAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN "BULGES"

POWERLOW IN THE SILT FENCE AND PROPERTY DISPOSED OF.

5. PLACE THE ENDS OF THE SILT FENCE UP CONTOUR TO PROVIDE FOR SEDIMENT STORAGE.

6. SILT FENCES SHALL BE REMOVED WHEN NO LONGER NEEDED AND THE SEDIMENT
COLLECTED SHALL BE DISPOSED AS DIRECTED BY THE ENGINEER. THE AREA DISTURBED BY
THE REMOVAL SHALL BE SMOOTHED AND RE-VEGETATED

MAINTENANCE

1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DALY DURING PROLONGED RAINFALL ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.

2. IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.

3. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.

BARRIER.

4. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

#### SEEDING GUIDE

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL	A B C	FAIR POOR POOR	GOOD GOOD GOOD	GOOD FAIR EXCELLENT	FAIR FAIR GOOD
AREAS	D E	FAIR FAIR	FAIR EXCELLENT	GOOD EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER	A C	GOOD	GOOD EXCELLENT	GOOD EXCELLENT	FAIR FAIR
CHANNELS WITH FLOWING WATER.	D	GOOD	EXCELLENT	EXCELLENT	FAIR
LIGHTLY USED PARKING	A	GOOD	COOD	GOOD	FAIR
LOTS, ODD AREAS, UNUSED LANDS, AND	В	GOOD	GOOD	FAIR	POOR
LOW INTENSITY USE RECREATION SITES.	D	FAIR	GOOD	GOOD	EXCELLEN
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	F G	FAIR FAIR	EXCELLENT EXCELLENT	EXCELLENT EXCELLENT	2/ 2/

GRAVEL PIT, SEE NH-PM-24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS. 1/ REFER TO SEEDING MIXTURES AND RATES IN TABLE 7-36.
27 POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREA AND ATHLETIC FIELDS.

NDTE: TEMPORARY SEED MIX FOR STABILIZATION OF TURF SHALL BE WINTER RYE OR DATS AT A RATE OF 2.5 LBS. PER 1000 SF. AND SHALL BE PLACED PRIDR TO OCT. 15, IF PERMANENT SEEDING NOT YET COMPLETE.

40

OFFICE

Ш

SN

AND